

**Hawai'i Volcanoes National Park
General Management Plan
Narrative Summary of Public Comments
Winter 2010**

Preservation and Protection of the Park's Natural and Cultural Resources

A dominant theme expressed in the public comments was that the park should be managed in a way that preserves, protects and restores the park's natural and cultural resources for the future. One commenter described the park as “***exhibiting an attitude of preservation of both Hawaiian culture and nature.***” Many comments expressed a desire for the park to continue to expand their efforts in resource protection. Preserving and protecting these resources and “***the ‘āina itself***” was viewed to be the “***ultimate responsibility of the park.***” Some comments also recognized the challenge of balancing preservation with enjoyment of the park's resources for current and future generations. While some comments recognized the need to limit visitation in order to protect resources, others also expressed a desire to ensure that the park remain accessible to visitors.

Native Ecosystems

Preserving native species and ecosystems was viewed by many as integral to maintaining the significance of the park. Both local community members and off-island visitors expressed that the natural beauty of the native landscape and the opportunity to see native species was something they cherished most about their visit to the park. Specific recognition was made of the ‘ōhi‘a lehua and koa, hāpu‘u (tree ferns), Hawaiian honeycreepers, Hawaiian goose (nēnē), Hawaiian happyface spider, Mauna Loa silversword, sea birds and sea turtles. Several comments emphasized the park's value as a pristine, undeveloped landscape and one of the few places in Hawaii to protect an abundance of native species.

The threat posed by exotic and invasive species to native ecosystems was repeatedly mentioned as a key issue facing the park, now and in the future. Respondents wholeheartedly encouraged the park to continue to aggressively target non-native species. Many of those addressing concerns about exotic species mention removal of *Morella faya*, kāhili ginger, ungulates (mouflon sheep, pigs, goats, cattle), and exotic grasses as key culprits. Several respondents also urged the park to increase research focus on effective control methods for other non-native trees as well, such as Christmas berry, strawberry guava, olive, and ekoa.

Comments also suggested specific strategies for controlling the spread or introduction of exotic species. Several stressed that the park should focus on fencing first as a priority, to protect native ecosystems from further degradation from non-native ungulates. Another commenter urged the park to consider using grazing management as a tool for reforestation. Many expressed appreciation that the park continued to do so much with so few resources and felt that funding and staff time for invasive eradication was critical to protect native ecosystems into the future.

A key point made by several respondents was support for the park's ecosystem approach to restoration. Some comments encouraged further expansion of efforts focused on the natural boundaries created by the eco-tones or ecosystems themselves, rather than any legal lines created by park boundaries. Specific mention was made of the potential for restoration in areas managed by the State of Hawaii such as the Ka‘ū Forest Reserve, Kapāpala Ranch, lands bordering Thurston Lava Tube (Nāhuku) and coastal zone areas as being critical buffers to protect and expand the viability of park ecosystems.

One commenter suggested the park should also continue to work on replacing the park's missing habitats, possibly restoring a coastal lowland forest with species such as native pritchardia palm, and including a coastal edge to support a native seabird rookery that would be protected from predators. Restoring fragmented sub-alpine and alpine ecosystems native to the upper slopes of Mauna Loa was also mentioned as being important given the projected changes to mauka plant

and bird distribution inherent with climate change. One person encouraged that the existing ecosystem fragments contained within the park's Special Ecological Areas should also be maintained and expanded to include restoration of the degraded dry 'ōhi'a woodland along Chain of Craters and Hilina Pali roads.

Numerous comments encouraged the park to modify or restrict human activities as necessary to protect natural resources. Actions mentioned include:

- Limit numbers of visitors if necessary to prevent trampling of vegetation
- Restrict air tours to protect natural sounds
- Require waiting commercial buses to turn off engines
- Scrub boots and wash cars upon park entry, to prevent the spread of invasive species
- Restrict dogs to protect the Hawaiian goose (nēnē)
- Increase visitor education to prevent impacts to natural and cultural resources as well as to minimize the spread of exotic species

A number of people expressed specific concerns about climate change as a key issue facing the park in the future and its impact on the future of park ecosystems. Several respondents gave specific suggestions for increasing the resiliency of native ecosystems in the face of climate changes. These suggestions include:

- Creating pig-free buffer zones to eliminate mosquito habitat due to predicted warming temperatures and introduction of new mosquito species
- Communicating with the US Fish and Wildlife Service about displaced seabirds due to climate change or sea bird trends seen in the NW Hawaiian Islands
- Considering the role of elevation gradients in the park for allowing species an area upland to migrate
- Recognizing partnerships become all the more critical with managing resources, including bird populations, in the face of climate change.

Cultural Resources and Historic Properties

Numerous comments mentioned the cultural significance of the park and connection to Native Hawaiian culture as something they valued most about the park. Many comments noted the valuable role the park plays in preserving and protecting cultural resources and that the park should be "*a place that just thrives with knowledge of the Hawaiian culture.*"

Several comments noted the cultural value of park landscapes and indicated that the park's open and undeveloped vistas and great scenic beauty are integral in maintaining the cultural values of the setting as a place of spiritual power or *mana*. Several people also urged the park to restore historic cultural landscapes by replanting trees such as coconut (niu), hala, milo, lama, and loulu.

Many of those who discussed the park's cultural values emphasized the need to increase the park's educational offerings related to cultural information. Numerous respondents suggested the park needed a location for display of the park's archival collection of Native Hawaiian artifacts. Mention was repeatedly made of the void in Native Hawaiian cultural information presented to the public created by the loss of the park's Waha'ula Visitor Center.

Respondents also mentioned a desire to see or have access to the park's fine art paintings, historic documents and other items of important cultural research value contained in the park's library museum collection and archives. Several mentioned the need for a new location for the park library and collections due to the poor access offered by its basement location at park headquarters. An increase in collection staffing was also suggested.

A matter of special concern to the public was the need to identify and properly care for Native Hawaiian archeological sites. The petroglyphs at the Pu‘u Loa archeological site were repeatedly mentioned as being of cultural importance and a sacred place of ancestral connections for Native Hawaiians. One respondent mentioned the need to complete archeological surveys in coastal areas. Several people encouraged the park to partner with the Kalapana community to survey and interpret archeological sites in the area known as the “Kalapana extension”. Several respondents posed questions about the park’s future plans for the archeological resources at the historic Kealakomo settlement.

A subject noted by some was the park’s historic ambience, with several people urging the park to protect and maintain the historic flavor of the park’s infrastructure. One historian gave detailed comments on protecting the park’s historic buildings and structures, suggesting specific cultural resource partnerships to protect historic buildings and urging increased research and expanded knowledge on architectural features and sites related to the Civilian Conservation Corps, WWII sites related to Japanese internment and imprisonment of Italian and German POW’s and structures related to Mission 66 as well as early tourism in the park. One comment suggested that the park could buy some land at the site of old Kalapana and restore the old buildings destroyed by lava. Several respondents urged the park to increase public use of the historic ‘Āinahou Ranch buildings and landscape for educational programs, meetings and retreats.

The park was also encouraged to restore the Kalapana trail, as one of the park’s most culturally important trails. Another historic trail suggested for restoration was the historic fishing trail at Na‘ulu. Several respondents urged the park to create a trail connection to the Ala Kahakai Historic Trail.

The public also suggested the following specific topics or sites for research and/or interpretation:

- Displays should include Pre-Pelehonuamea Hawaiian and post-abolished Kapu
- Include the role of missionaries and Ali‘i in cultural stories presented to public
- Include Paniolo history in the park
- Do a context study for ranching history in the park
- Native Hawaiian lifestyles and use of tools
- Archeological ethnography and resources
- Puna Historic District
- Share settlement pattern, large cultural landscapes including Piko and Wao Kahakai
- More coastal cultural trails that interpret life without damaging resources.

Significance of Park Resources to Native Hawaiian Culture

A number of comments received emphasized the park’s great cultural and religious value to Native Hawaiians and as a place of ancestral connections. The presence of these ancestors is what makes Hawai‘i Volcanoes National Park a very special place. Several also mentioned that a cherished value of the park is the active presence of the volcano deity, Pelehonuamea who resides at Kīlauea. Many expressed gratitude that the park preserves the natural beauty of a lush native landscape—the ‘ōhi‘a lehua trees, native birds, rocks and ferns—as a pristine place of old Hawaii, where their ancestors, deities and ‘aumākua live in the spirit of the land and where they feel most connected to them. One commenter expressed, ***“I think of the park as a grand temple that houses my ancestors and deities that look after me.”*** A view expressed in several comments is that there is no separation between nature and culture and that park management should seek to

integrate them. Several mentioned that protecting the park's natural resources is important to Native Hawaiians who view the native landscape as an integral component of native Hawaiian traditions and practices, emphasizing protection of the āina, or mālama 'āina, a key Native Hawaiian teaching.

The topic of Native Hawaiian access for traditional activities and uses such as plant collection and fishing was addressed by some respondents. Several stated they valued the park's commitment to honor Native Hawaiian access for traditional purposes and were grateful that practitioners could "share their gifts and mana'o through hula, mele and crafts". One respondent strongly felt that a hula platform or monument of Pelehonuamea should be built closer to the rim of Halema'uma'u, so that visitors, as well as all others could pay homage to Pelehonuamea in a proper way. Another suggested that cultural demonstrations at the current hula platform should be moved to an area that is quieter and less congested so that practitioners could have better focus.

The belief that cultural practitioners were over-managed in their gathering of plants for medical and spiritual purposes was offered in a detailed explanation by one person who suggested some sort of certification process to replace the current rules. This certification would include education and emphasize no selling with a provision for determining the amount of need, depending on how sick a person might be. A few respondents stated that traditional collecting activities should remain focused on Kīlauea, and not allowed on Mauna Loa at Kahuku. A few people also stated that tourism access to areas used for cultural traditional practices should be controlled.

Among those who commented on Kalapana fishing access rights, one person emphasized that Hawaiians should continue to have the right to fish but that others should not be allowed along the coast. Another person also stated that Native Hawaiians should not be able to guide others in for fishing. It should be strictly for Kalapana Native Hawaiian use.

Several respondents raised questions about whether the park would be managed over time in a manner that shows respect for Native Hawaiian beliefs and traditions. One person stated that the national park management system treated Native Hawaiians like tourists in their areas of significance and strongly felt that Native Hawaiians should have more freedom throughout the park.

Some responses mentioned support for the park's informal kūpuna consultation process. A few people suggested that the park kūpuna group might be expanded to include Native Hawaiians from other areas, even other islands. Of those who expressed a comment about the kūpuna consultation, one commenter voiced the belief that as well as the kūpuna, many people have ideas and feelings when it comes to honoring Pelehonuamea and perpetuating the culture of Hawaii and that the park needs to be sure to share or be open to all views on the park's spiritual value, not just those of Native Hawaiians. Another commenter expressed the fear that a strict interpretation of Native Hawaiian cultural significance might require dismantling of buildings such as Jaggar Museum at Uwēkahuna or restrictions on routine park operations. This same commenter urged that Native Hawaiian significance be balanced with the park's designation as a national park for continuing visitor uses that are important for connecting all types of visitors to nature.

Many respondents echoed the concern that most off-island visitors often do not realize the spiritual value of the park to Native Hawaiian people. Several encouraged that all park visitors should receive information about the significance of the park for Native Hawaiians, including

“protocol and cultural significance of the park and special sites,” so that they would understand the sacredness of these lands and treat its resources with the proper respectful behavior.

Many of those who commented on cultural significance of the park also emphasized the need to increase education and interpretive opportunities related to the park’s Native Hawaiian cultural significance and cultural history. Strong support was expressed for a building or place dedicated to interpreting Native Hawaiian stories and as a site for cultural demonstrations and display of the park’s archival collection of Native Hawaiian artifacts. An overriding view was expressed that all visitors; Native Hawaiians, local residents and off-island visitors need to learn about Native Hawaiian culture. One respondent requested that a broader Hawaiian cultural history be interpreted to include pre-Pelehonuamea history as well as post-abolished Kapu. Several urged that the park use traditional Hawaiian place names, Hawaiian language, and chants on maps and educational materials.

An overriding theme to all Native Hawaiian cultural comments was that the protection and interpretation of the park’s Native Hawaiian values and stories was important for Native Hawaiians for generations to come. Several comments by young Native Hawaiian students emphasized that all children in the future need to know about Native Hawaiian culture. While most comments on culture geographically referenced the park as a whole, several sites were repeatedly mentioned by respondents as being of great value to Native Hawaiians. Those mentioned most include Kīlauea eruption sites, Pu‘u Loa petroglyphs, the Kalapana trail, Kealakomowaena, Steam Vents, the cultural landscape that includes Piko, Wao Kahakai, and the site of old Kalapana. Several also suggested that the park should connect to the Ala Kahakai National Historic Trail and connect a trail section through the park as a means to promote Native Hawaiian ancestral connections and connect Native Hawaiian families to park lands.

Importance of Research in the Park

Support for the park’s role in furthering research and advancing science is also mentioned in numerous comments. One respondent expressed that research by National Park Service (NPS) staff as well as other agencies, allowed the park to stay on the leading edge of discoveries and understanding which help to support the delicate balance of park ecosystems. Many of those who commented about research specifically stated that there should be more participation by the public in scientific observation activities as well as more sharing of current research findings with the public. Several respondents also noted that research on geologic processes and the presence of the Hawaiian Volcano Observatory in the park was important to help educate and explain the geologic processes to the public. One scientist urged that zoning for the GMP should be sure to include a provision for future monitoring and study in all zones, since access to any part of the volcano, at any time is needed to insure future monitoring activities.

Other specific suggestions/comments related to research included:

- Need to continue baseline inventories
- Value of air quality studies
- Housing for researchers would allow more research to happen
- A preservation field school for cultural research
- Need to increase education outreach to involve young students and “citizen scientists” in research
- More application of research findings and support for innovative management
- Minimize the presence of research establishments like on Mauna Kea

- Request researchers to create a pamphlet or document to make their research accessible to the public
- Think about charging for research
- Concern about researchers who hike and possible introduction of exotics/invasive species
- GMP should include sophisticated social science since visitors are not homogenous groups of people
- More structured approach to determine who gets to do what research
- Hawaiian Volcano Observatory may need to expand their footprint in next 20 years
- Gas scientists have a strong need to use Crater Rim Drive for two-way travel for monitoring calibrations on equipment used to monitor SO₂ emissions.
- Long-term monitoring and long-term climate change research collaboration with park and science community is a great benefit.
- Special use agreements for research should last more than 5 years; since much data requires more than 10 years for monitoring.

Visitor Experiences: Activities, Programs and Facilities

Overall Visitor Experience

One of the questions asked by the NPS at public scoping sessions and in the newsletter was “Imagine you are visiting Hawai‘i Volcanoes twenty years from now, what you would like to experience?” Most respondents said they would like to experience the park much as it is today, placed high value on the overall natural setting of the park, and urged the park to protect its natural beauty. In general, comments frequently expressed value in the many and diverse opportunities to connect with nature in the park. The park’s volcanic landscape and lush native forests as a place to see and listen to sounds of Hawaii’s native species and natural processes were frequently mentioned as qualities that people value most about the park. One commenter stated, ***“The natural beauty of the landscape and the ability to have access to engage with the environment is one of the many reasons I value the park.”*** Comments also commonly referenced the park’s “*sacred mana*” and spiritual significance and the scenic vistas; the peace and quiet and the historic ambience and feeling of old Hawaii. Several intangibles are also used in characterizing a future vision for the visitor experience. One person described the park’s “*overwhelming presence and spirituality*.” Another expressed this sentiment as, ***“What I value most about Hawai‘i Volcanoes National Park is the way I feel when I visit, which is to say I feel moved, inspired, touched by the beauty of this phenomenal and vibrant place on the planet.”***

Recreational opportunities valued by respondents and desired in the future include camping and picnicking, as well as an array of activities including scenic driving, participation in ranger-led programs and education-related activities, viewing interpretive signs, bird watching access to view endangered and rare birds, dog walking, special running events and horseback riding. One person suggested that hot ponds could be created for public use, working with high and low tides somewhere along the coast. In describing a future vision, the most frequently mentioned facilities included interpretive exhibits, trails, restrooms, campgrounds and picnic areas. Many encouraged that the park consider earth-friendly and sustainable materials, as well as solar and other climate friendly technology, for any facility projects.

In discussing the future of park facilities that support the visitor experience, many respondents urged that the park should remain the same, minimize development, and maintain the ***“historic flavor of the existing infrastructure.”*** Comments urged the park to maintain, improve or upgrade existing infrastructure from bathrooms and campsites to railings at overlooks before adding new

development. Comments suggested that any expansion needs should be accomplished by adaptive re-use of current park buildings and infrastructure. At the same time, respondents encouraged the park to create some new facilities when needed.

Education and Interpretation

Many comments received were both complimentary and enthusiastic about the current interpretive and educational programming offered, and were indicative of the high value placed on these programs and associated staff.

Many respondents emphasized the important educational role of the park and encouraged the park to expose visitors to more of the park activities and stories and provide access to key objects associated with park stories. By developing a wider range of educational opportunities for visitors, one commenter noted “...***the visitor to the Park is an important present and future resource. By providing a good experience in terms of programs and activities, the Park will be simultaneously developing future stewards who can engage in protection and preservation activities as volunteers, contributors, and supporters.***”

Respondents also expressed a desire for the park to continue to expand its offerings, notably as it related to increasing involvement of youth in the park. One respondent explained, “***many children are separated from nature; losing touch with nature***” and suggested “***more children's programs and room to play.***” Another viewed the park as an “***open classroom***” and saw opportunities to make the park relevant to today’s youth.

Comments also indicated a desire for increased education and community outreach, as well as a broadening of the park’s current level of interpretive ranger-led programs and on-site interpretive media such as brochures and waysides. The *After Dark in the Park* program was frequently mentioned as a popular program.

In general, people expressed satisfaction with the Kīlauea Visitor Center, but a few suggestions were made for updating or improving displays and photographs in the park and in the Jaggar Museum. Many people suggested increasing wayside exhibits in the park and listed a diversity of preferred topics. New interpretive trails suggested include short interpretive trails at Kīpukakī and on upper Mauna Loa road at the wilderness trailhead, more cultural interpretive trails, an interpretive trail in rainforest and an interpretive trail to interpret coastal resources.

The most frequently mentioned education-related facility needs expressed by respondents was the desire for a building or place dedicated to interpreting Native Hawaiian stories, a new cultural demonstration area, and a new facility for public display of the park’s museum collection of archeological artifacts, fine art paintings, and other historic items. Two respondents emphasized that a new facility dedicated to interpreting Native Hawaiian culture should be staffed by Native Hawaiians. A common thread to the comments was the hope that future visitors would learn about the park’s significance to Native Hawaiians so that they would understand the importance of the park and treat it with respect.

Respondents also urged that the park meet its’ mission to serve park visitors by expanding community outreach efforts, training park concession employees and increasing partnerships and outreach to local communities and schools as well as off-island audiences. Several people mentioned that the park should think about connecting with new generations of visitors. One respondent gave detailed comments urging that the role of national parks was to deepen the experience of park visitors by creating ways for them to immerse themselves in nature and have transformational experiences. Another submitted thoughts about a future park that envisioned

outreach to insure that people of all backgrounds, ethnicities and interest had an opportunity to have a national park experience.

The public offered a wide diversity of ideas for expansion of park themes and a few people expressed the desire to be able to see first-hand the work the park is doing related to reforestation or rare species recovery. Ideas and suggestions about interpretation, education and outreach programs include:

- Update the geology exhibits to offer more contemporary and interactive displays
- Take visitors to explore the park's reforestation areas
- Provide opportunities to view rare species of birds and rare species recovery activities
- Improve lookouts by having audio stations
- Consider a joint Visitor Center on the Big Island in Hilo with other agencies and organizations
- Move the visitor center outside the park
- Extend the Jaggar Museum roof to create a covered lanai overlooking Kīlauea to shelter visitors from rain, especially during ranger/volunteer lectures
- Think about a bookmobile-type van to move staff around to where the eruption or interest is located
- Important to educate people/raise their awareness about importance of preservation and the "abc's" of hiking, such as staying on trails
- The park seems closed after 5:00 pm; longer hours at Kīlauea Visitor Center
- Engage visitors with new interpretive signs
- Need to have roving interpreters at Nāhuku, Jaggar and other busy spots all day long
- Open Junior Ranger program to all ages; provide a citizen scientist program so anyone of any age can become a "junior ranger". Overnight visitors from the Volcano House, Kīlauea Military Camp, and nearby volcano community could participate as citizen stewards
- Keep going with silversword restoration and monitoring with students
- More educational programs for kids; supplement to curriculum in school; many children are separated from nature; losing touch with nature.
- Every couple hours do kid demos
- Make exhibits more interactive
- I would like to see more and new kid-friendly exhibits
- Develop partnerships with local community schools that bring kids into ownership with the park
- Have every 4th grader in the state to HAVO
- Upgrade interpretation at the footprints
- More signage at Bird Park
- Need a trail to identify native trees and plants
- Walking tour that describes the geologic formations
- Need funding for bus transportation for school field trips
- More service-learning projects with students

Access to Lava

Public comments emphasized that viewing the formation of lava and volcanic eruptions was a "once-in-a-lifetime" opportunity and a valuable visitor experience that should be continued. Many expressed their appreciation for being allowed to get close to eruption sites and flow areas. Several people discussed the possible dangers associated with viewing active lava and urged that

the public be educated as to the hazards yet still allowed to get close. One person expressed, “***No other place in the world can you can drive in and drive right up to a crater; even with liability concerns it is good to have public access.***” Several people mentioned that seeing special volcanic features, such as the path of the various volcanoes along Chain of Craters Road, Thurston Lava Tube (Nāhuku), emissions from the various steam vents, and Halema‘uma‘u Crater provided an important experience as well as astounding evidence to visitors and the world regarding the role of volcanoes. One person exclaimed, “***For me, the Kīlauea Caldera is the equivalent of a volcanic Grand Canyon—awe inspiring!***”

Hiking and Biking

Many respondents expressed their appreciation for being able to experience the park’s beauty by walking or hiking throughout the park. A number of people expressed a desire for a more extensive trail system and one that provides additional connections linking backcountry coastal trails with wilderness trails at the highest reaches of the park on Mauna Loa, as well as connections between existing front country trails. A variety of ideas for adding hiking and interpretive trails at various locations including along the Mauna Loa Road were suggested. Respondents expressed a desire to see new trail designs that incorporate a loop hiking experience. However, several comments cautioned that the park should only build what it can afford to maintain and should focus on maintenance of existing trail networks. A few people urged the park to support a trail proposal initiated by the Nature Conservancy that would link park trails with state and private landowners through an upper elevation trail system that would encircle Mauna Loa.

Many respondents urged the park to provide an improved bicycling experience in the park. Time and again, respondents emphasized the need for better road and trail planning that incorporates safe use of the park by bicyclists to visit all of the prominent points of interest in the park. Many of the bicycling respondents encouraged that trail use by bicyclists and hikers be kept separated. One person emphasized that the park should not allow bikes in the park at all because the park is sacred.

Comments varied on the extent to which bicycling should be allowed-and how the park should manage this recreational activity. A number of respondents felt that the park should allow bicycle use of primitive roads or abandoned trails. Several advocated for new single-track backcountry bicycle trails. A few people noted the potential for a bike path from Nāmakaniipao Campground up to Jaggar Museum and connecting over to the Mauna Loa Road. Local residents emphasized the need for safer bicycle paths between the park and neighboring communities for use by commuting employees, residents and visitors, and highlighted this opportunity as a way for the park to encourage sustainability. Several respondents encouraged the park to partner with biking groups in order to accomplish needed trail maintenance.

Many comments provided specific suggestions for individual trails. Suggestions include:

- More walking trails, easier trails
- A trail for hiking and walking between the community and the park
- Distance between shelters is too far apart at Mauna Loa summit; need to be closer because of altitude; potential weather and air quality issues
- A good natural loop at the top of Mauna Loa road for birding
- Connect Kīlauea Iki to Pu‘u Pua‘i or Devastation Trail to create a loop trail
- Develop a loop trail from the base of Pu‘u Huluhulu that goes along the 1973 flow to Pauahi Crater then back and loop trail off Chain of Craters road around Lua Manu Crater
- Develop a trail to the Great Crack

- Re-open the Kalapana Trail starting at the hairpin on Chain of Craters Road
- More hiking trails around park campgrounds that link to other trails
- New short loop trails designed for shuttle riders
- More benches on trails that face views
- Need cell phone reception for emergency use for lava hikers at the end of Chain of Craters Road
- Provide bikes for free use by visitors throughout the park
- Provide bike racks at trailheads for riders to lock bikes
- Clearly sign park trails where bicycles are allowed

Camping, Picnicking, and Restrooms

In describing a future vision for the park, many people mentioned a desire for improved camping opportunities to increase the range of experiences. In general, comments suggested that campgrounds should be secure and “*family-friendly*” environments. One commenter noted that the park campgrounds require either hiking several miles or car camping, and requested “*something in between*.” Requests for overnight camping improvements ranged from a backcountry camp system and a system of cabins connected by trails to more accessible campsites, including bike-in campsites.

Specific ideas included:

- Link campgrounds by walking and bike paths to key destinations
- Develop a backcountry cabin system connected by hiking trails
- Develop hike or bike-in campsites
- Offer a concession-run, hard-wall tent cabin experience similar to the camp system

A few respondents suggested the park add picnic tables at several locations including Pu‘u Pua‘i, Mauna Ulu, Kīlauea Visitor Center and Kīlauea Iki trailhead.

Many comments emphasized the need for maintaining or improving existing restrooms as well as providing additional restrooms. Comments suggested restrooms at key trailheads and along heavily-used front country trails such as Kīlauea Iki. Comments also highlighted inadequate restrooms at Jaggar Museum and Thurston Lava Tube (Nāhuku) and noted that the condition of these facilities as well as a lack of restrooms in certain areas impacted the visitor experience. Respondents expressed concern about visitor impacts including litter and social trails that were attributed to a lack of facilities. A number of people encouraged the use of compost toilets while one person felt that running water toilets would be better.

Soundscapes

Respondents frequently mentioned their appreciation and desire for experiencing the park’s natural soundscapes. One person expressed this sentiment in the statement, “*Natural sounds are powerful experiences - encourage people to engage in that experience*.” Some comments stated the desire for “*the sounds of more native species*” while others simply discussed the desire for “*pristine natural quiet*.” One person urged that air tours be available in the park, or nearby. Others emphasized that air tours should be banned due to the importance of protecting natural sounds and allowing opportunities for solitude, tranquility, serenity and quiet.

Dogs

A variety of comments were received that addressed visiting the park with dogs. A few people encouraged the park to be more dog-friendly, allowing leashed dogs on trails. Others thought that

the park should do a better job of enforcing the current no-dogs- on-trail policy and perhaps ban dogs altogether from entry due to potential threats to the Hawaiian goose (nēnē).

Accessibility

Respondents stated that the park needed to insure that people with physical disabilities are able to experience the park outdoors, through accessible trails and facilities. One person emphasized that accessibility was not just parking, but a whole host of cognitive needs, such as language and interactive exhibits that needed to be considered for a successful visitor experience.

Wilderness

Many people noted that they highly valued the park's open undeveloped vistas, sense of wildness and opportunities for solitude offered in many park settings. One person felt that the park should protect that ***"feeling of wildness, even if it meant limiting the numbers of visitors"***. Several expressed that the park's wilderness from mauka to makai, offered an extraordinary visitor experience. Many respondents felt that the visitor experience in wilderness should be enhanced by providing better water sources, cleaner cabins and shelter conditions, compost toilets and construction of at least one new shelter on Mauna Loa to offer a shorter traveling distance between camps. Several stated that the park should have a greater emphasis on wilderness values. Respondents felt that the park should consider any suitable areas, such as the upper areas of Mauna Loa and any other places possible to designate significant portions of the park as wilderness. One person cautioned that the park should be careful with wilderness designations as it can make critical protection and restoration activities, such as fencing, much harder and more expensive. Several scientists noted that there will be a continued need to have instrumentation in wilderness for monitoring.

Crowding and Congestion

Crowding and vehicle congestion along Crater Rim Drive was frequently identified as a key issue facing the park. Numerous comments urged the park to reduce concentrations of people, cars and buses at Thurston Lava Tube (Nāhuku), Kīlauea Visitor Center and Jaggar Museum. One person expressed, ***"I would like to go to the park and experience beauty in a peaceful environment, not feel like I am trying to get through crowds at the mall at Christmas time"***. Another exclaimed, ***"Too many people who are treating it like a "drive- through"***. Respondents also urged the park to resolve parking congestion at the eruption site to keep visitors from walking long distances to their cars.

Transportation, Roads and Parking

The future of park roads was a topic of interest to many respondents. A consistently stated perspective was that the park should create safer road conditions, primarily to accommodate bicyclists. Road conditions were discussed in great detail by one person who cited several locations where bicyclists were forced to leave the road or travel in vehicle lanes due to the current pattern of road use. A number of people asked that the park designate bike lanes to separate bicycles from cars or create separate bike paths altogether, in order to create safer park roadways. The Mauna Loa Road and Crater Rim Drive were often identified as needing designated bike paths and were felt to be too narrow for bicyclists, cars, buses and pedestrians at the same time.

A couple of people suggested that park roads such as Hilina Pali and Mauna Loa Road, be closed to vehicles on certain days of the week, allowing travel only by bicycles and pedestrians. One person suggested speed bumps be installed between the Kīlauea Visitor Center and Jaggar Museum as cars are currently traveling too fast.

Several comments expressed the desire to maintain a loop trip around the caldera on Crater Rim Drive. More specific comments about the future of Crater Rim Drive varied. Several people urged that Crater Rim Drive not be widened and that travel on Crater Rim Drive should be changed to one-way traffic. Employees at the Hawaiian Volcano Observatory expressed concern about Crater Rim Drive becoming one-way only and wanted to ensure maximum options for road uses, especially given current monitoring needs and possible future need for evacuations. One person felt that using federal highway funding encourages wider, larger roads, which adds to the degradation of the park and doesn't best protect the park for future generations.

Several respondents emphasized that road development should be minimized; however, several comments addressed a variety of other roads in the park. One person urged that Chain of Craters Road to Kalapana should be re-opened. Another suggested that the park needed a new fire road near 'Āinahou Ranch that could also be used by the public.

Parking was discussed by the public with many noting the parking problems at Thurston Lava Tube (Nāhuku), Kīlauea Iki and the Kīlauea Visitor Center due to concentrations of visitors along Crater Rim Drive. Several suggested that parking for buses and cars would be better positioned outside the park. Others thought that private vehicle access should be restricted with parking in large lots and travel by shuttle. Some urged that construction of any large parking areas should be cited where only minimal clearing of native vegetation is required. A number of people urged the park to alleviate traffic and parking congestion at the eruption site and insure visitors are not hiking an extra two miles to their cars. Employee parking at various locations throughout the park was noted as being inadequate for the next 20 years. Trailhead parking and road pull-outs to accommodate horse trailers were also advocated by a few respondents.

Several respondents urged the park to create alternative park entrances off Highway 11 into the park, even if just for staff use, to help alleviate congestion and offer evacuation routes. A few people thought the park should have more significant signs at the main entrance to the park, visible from both directions so that visitors have a better sense of arrival and know when to turn.

The topic of bus tours was an issue raised by some respondents. Some felt that large tour buses introduced a hurried and noisy element into the park setting. Many respondents emphasized that park roads are too narrow to accommodate the current size of buses, along with private vehicles, bicycles, and pedestrians. Several people thought that smaller, more energy efficient shuttle buses would be more appropriate. Many people stressed that tour buses should be required to turn off their engines while idling. The idea of separate parking for commercial buses was also suggested by respondents.

Alternative Transportation

In general, opinions about alternative transportation were mixed and ranged from continuing to allow private vehicles to give visitors maximum freedom to a shuttle-only access to the park. A significant number of respondents envisioned that the park would develop a “*climate-friendly*” shuttle system for visitor use in the future in order to reduce private vehicle use and alleviate parking congestion. Most people seemed to be describing a “*hop on, hop off*” shuttle bus that would travel on a routine schedule, stopping at key destinations and leaving from a hub or central location. Several thought that the shuttle should be staffed by interpretive rangers.

Some comments suggested that private vehicles should have restricted access with certain areas open only to those traveling by shuttle. A few people thought that private cars should not be allowed in the park at all, with travel only by guided shuttles. Others thought that some private cars should be allowed to give visitors freedom to hike and explore less traveled areas.

Opinions varied as to the best type of shuttle technology, but a majority emphasized that the park should explore all climate-friendly options, mentioning solar, bio-diesel, electric, and even horse carriage. Other transportation related ideas included the suggestion to use Cooper Center in Volcano Village as a “***park and ride***” to connect island-wide mass transit with the park, and a trolley, rail or tram system.

Commercial Services and Special Park Uses

In describing a future vision for the park, the public voiced a strong interest in not over-commercializing the park. There was concern expressed about “***commercial pressures that diminish park values***”.

However, many comments received addressed a desire for a diverse range of food, lodging and retail services to be available within the park. Many people expressed that the current types of services available to visitors did not do justice to the beauty and elegance of the park setting.

Many respondents felt that concessions serving the public should offer more educational programs and integrate Hawaiiana into the services provided. One person urged that the concessions be required to have standards of interpretation for employee training and incentives for businesses and operators who engage in the park mission. A few people expressed the fear that concessions management by large corporations would create an ambience not necessarily in keeping with the historic setting of the park.

Numerous comments strongly emphasized future opportunities to improve the greatly underutilized potential of the Volcano House Hotel. Some comments expressed extreme dissatisfaction with the current condition and use of Volcano House. Many people felt that the current environment was not family friendly and that a snack bar/buffet did not do justice to the power of the outdoor setting, encouraging an environment that catered to mass feeding of large crowds, who visited primarily by tour bus. Various suggestions were given related to remodeling in order to provide better views of the crater, as well as expansion of the range of food services provided. One commenter expressed a desire that “***The Volcano Lodge would be brought back to its traditional elegance with true aloha expressed and felt from entrance to departure. Each visitor would be greeted. Ka Lua Ple would be seen immediately when entering the hotel. Shops would be off to the side as if an after thought and would have products made by native and local artisans. Meals would be geared towards locally grown products and produce. Environmentally sound and sustainable would be the goal of the entire operation.***”

A number of respondents felt that increased visitor services or expansion needs could be accomplished by better adaptation or utilization of the existing footprint of current park buildings and infrastructure. Some questioned the current configuration or allocation of park uses to the various buildings. The public had varied opinions as to which organization or concession entity should be located where, yet there was an overall sentiment to analyze the future uses of all park buildings. For example, some respondents felt that the Kīlauea Military Camp should be opened to the general public, not just military personnel, as a means to provide a mid-level range of commercial lodging, food and retail services to visitors. Comments generally indicated future

potential to make better use of and increase existing square footage or infrastructure that is open for public use and accessible to a wide array of visitors.

A number of people suggested various ideas or support for concessions, or special activities and uses important for the visitor experience. Comments/suggestions include:

- A greater range of lodging opportunities, including less expensive cabins or tent cabins
- Free drinking water throughout the park
- More public showers
- A coffee house or coffee bar
- A culinary institute
- Locally-produced functional souvenirs and gift items
- Requirements/incentives for concessions to sell locally produced foods and handicrafts
- Lava boat tours with guides
- More vending machines for snacks and water
- Lava guide training and certification for commercial guides to view lava
- Commercial backcountry outfitters
- Internet or wireless access throughout the park
- Less courting of helicopter tourism
- Create helipad in the park or outside the park with ground transportation
- Fewer and smaller size of tour buses
- Requirements for concessions to recycle and use sustainable materials
- Nourish the role of art within the park like the Volcano Art Gallery and offer more programs like the Ansel Adams Gallery in Yosemite National Park
- Continue to allow running events like Kīlauea Run to connect people to the park and increase park stewardship and means of funding of park educational programs
- Park roads are too dangerous for bike tours
- Allow horseback concessions in the backcountry

Park Operations

Over the course of the scoping period, the public commented on various park operational issues such as visitor and staff safety, entrance fees, funding, maintenance, sustainability, enforcement and communication with park constituents.

Many comments noted that on-going volcanic activity and air quality issues will likely be a presence in the park over the life of the GMP, requiring continued flexibility on the part of park management. The topic of visitor safety while gaining access to lava viewing was also a popular subject with many stressing the importance of the park's role in insuring that visitors were informed of the hazards and the kinds of things they needed to wear and bring in order to view lava safely. One person felt that the park should address visitor and staff safety when entering and leaving buildings and vehicles when there were hazardous air quality conditions.

There were many comments urging park staff to be responsive regarding road and trail closures due to air quality by monitoring closely and re-opening when safe. One person suggested this would be similar to a routine snow closure, with rangers monitoring road or trail conditions and opening quickly when conditions allow. Some felt that Crater Rim Drive could be opened and closed daily, with some controlled use. One person suggested that visitor access could be allowed on the closed stretch of Crater Rim Drive aboard guided shuttles to insure visitor safety, yet allow access. Several people felt that the park evacuation plans should be shared with locals and the public so that people are aware of where they should go. Several comments complimented the

park regarding how quickly the extra staff was added at the Jaggar Museum after the eruption at Halema 'uma 'u.

The public commented about entrance fees, with several urging the park to adopt fee-free days or annual passes for Kama 'āina in order to build a local constituency and reach out to lower income families. A few protests were made about paying fees when tax dollars already support the NPS. One person protested having to pay a fee when there is a public presentation or public meeting at the park. A number of other respondents urged the NPS to increase fees for entrance and front and backcountry camping permits and to use the revenue to pay for maintenance or for a search and rescue fund. One person thought that there should be little or no fees for those entering on a bicycle or on foot to reward those visitors who have a lower carbon footprint. Another thought that the park entrance should be free after 4pm to allow locals and visitors to watch the sunset.

The topic of creating a new permit system for guides to take visitors to view lava was also mentioned. One person suggested that the National Park Service should consider lava viewing in the same category as rafting the Colorado River in Grand Canyon National Park or climbing Denali in Denali National Park, and develop some sort of permit system for rugged or remote lava viewing, in order to allow controlled access to areas that are now closed to visitors.

The public commented often about the need for increased funds for maintenance. Many comments were made about the need for front and backcountry trail and cabin maintenance and the need to better manage the rubbish on Mauna Loa summit and also at remote backcountry cabins. Many suggested increased visitor education on backcountry etiquette such as “pack it in, pack it out” and “leave no trace” to educate hikers. A number of people also emphasized the need for increased enforcement in backcountry areas noting problems such as hikers without permits, dogs’ off-leash, illegal campfires, and rubbish left behind. Several people urged the park to continue to use horses for backcountry maintenance, as a viable option in the future when fuel costs may be restrictive. Comments were also made about the need to maintain park fences overtime to insure ungulates are kept out. One geologist commented that the park should not bring in rocks for maintenance from Mauna Loa to Kīlauea as this could confuse geologists overtime.

The topic of communication infrastructure was raised by respondents. The scientists at Hawaiian Volcano Observatory emphasized that communication infrastructure is essential to their operations now and in the future. Several respondents urged that the park should have wireless internet access available all over the park. Others felt that there should be better cell phone coverage and a tower for emergency 911 phone coverage down Chain of Craters Road. One person noted that this could create more SAR events but overall would be a benefit to park visitors. Another thought that the park should post the information phone number regarding current lava flow updates so people can call on their cell phones while en route to the park.

The public also urged the NPS to communicate with the best information. Many noted that the park is doing a great job. Several suggested the park could improve communication by linking out with visitors through You Tube or My Space and Twitter and better utilize opportunities to communicate with park partners and community organizations.

A number of people expressed a concern about the long term availability of funding for staffing, visitor contacts, building maintenance and preservation and restoration of resources. Many concerns were expressed about the need for future funding to remove invasive species. Several people cautioned that the park should take care not to build more, if they could not care for what already exists. Several expressed appreciation for how much the park does with so little monetary

support, due to the high caliber of staff and volunteers. One person noted the “aloha spirit” of park staff. Another expressed how much they valued the engaged, informed and caring staff and volunteers. Several expressed that the park should hire only those who love and know the park well, not just job seekers. Others thought that the park should hire locals first. One respondent urged the park to hire more enforcement staff for coastal areas.

Boundary

The topic of whether the current size and boundary of the park is adequate for the future was of particular interest to a number of respondents. Several urged that the park should be as large as possible and consider the addition of any new lands, if they were to become available. Specific parcels consistently suggested for potential acquisition include:

- ☒ extension of the park to include Hualālai Volcano
- ☒ adding the Great Crack along the western Ka‘ū boundary
- ☒ inclusion of state lands known as Tract 22, adjoining the eastern park boundary near Thurston Lava Tube (Nāhuku)

Several urged the NPS to consider acquiring state lands at Kapāpala Forest Reserve to act as a land bridge to connect Kahuku to the east with the rest of the park, as well as widening the neck of park land along the Mauna Loa Road. A state easement was also suggested across Kapāpala Ranch to allow trail access from both Kahuku and Mauna Loa Road to connect to the ‘Āinapō Trail. Other respondents urged the NPS to create a national seashore along the Ka‘ū coastline extending the western border of the park. One person pointed out that the formation of Pu‘u ‘Ō‘ō on the eastern edge of the park has created a boundary line that travels right through the center of the crater and that the park should negotiate with the state to re-route the boundary to include the entire circumference of Pu‘u ‘Ō‘ō as part of the park.

Several people pointed out that the park should consider the needs of the ecosystem first and let that determine the location of designated park boundaries, as opposed to any legal lines that currently exist. The idea of “*thinking beyond boundaries*” was mentioned several times by the public as an important philosophy for the park to adopt in preparing for the future. Park participation in the Three Mountain Alliance came up many times in comments as an example for describing the important future work that the park needs to do regarding protection of watersheds, native forest restoration and increasing resiliency for Hawaii’s endemic species in the face of impacts related to climate change. Within that context, several urged that the park make an effort to acquire state conservation areas that are mauka and contiguous to park boundaries as critical habitat for rare and endangered species. The Ka‘ū Forest Reserve was suggested in this context, as a key parcel for possible acquisition that could strengthen the park’s conservation vision for restoring native forests and to protect and expand habitat for forest birds and for the future introduction of the Hawaiian Crow (‘alalā). Another area targeted in comments related to a conservation purpose was expansion of the narrow neck of park land along the Mauna Loa Road to better prepare for potential upslope migration of vegetation and species in response to climate change.

Partnerships and Collaboration

Comments supported and encouraged partnerships and collaborative efforts as a critical tool for expanding the park's ability to achieve park goals and the park service mission in the future. Mention was made both of continuing existing partnerships and developing new partnerships and collaborative efforts in a wide array of program areas, from resource preservation to facilitating visitor access to the park. The subject of increasing community engagement was also addressed by many members of the public. Numerous supportive comments were given regarding the park's participation in the Three Mountain Alliance, as a model of collaboration and a successful example of a larger, regional strategy for natural resources management. Many emphasized that the park needed to nurture a collaborative approach to conservation issues. One person emphasized that the park should not engage in any "space industry" type of partnerships as they were an affront to Native Hawaiian culture.

Many stated that local communities and the park needed to work together in the future. Several respondents expressed that enhancing communication with community organizations was an important means to tackle issues that are vital to both, such as removal of non-native species, protection of shoreline/coastal areas, transportation, biosphere reserve buffer zones, world heritage site issues, gateway communities and shared resources. Several respondents felt that the NPS should be the leader and initiate conversations with local communities regarding these issues as a means to provide the vision for surrounding communities, who have little exposure to the types of projects that might be possible. Several expressed that community connections with neighbors and local populations would build a foundation of future park stewards.

The public offered many suggestions for ways that partnerships could help the NPS in its work, including:

- Utilize long history of joint restoration activities at Keauhou on Kīlauea
- Collaborate with UH, Manoa on their new sustainable tourism program
- Create shared, common resource protection messages for use by all agencies and organizations for educational use with residents and visitors
- Share volunteers with National Oceanic Atmospheric Administration (NOAA) in Hilo at Mokupāpapa Visitor Center
- Maintaining bird populations at higher elevations requires partnerships
- Hawaiian Volcano Observatory and HAVO could partner to share a solar farm in order to reduce energy consumption
- HAVO and state should partner to have smoother transition at trailheads on north side of Mauna Loa to reduce rubbish outside boundaries
- HAVO and County should partner so that the NPS could provide interpretation
- Engage more local groups for shoreline protection such as Ohana O Honu 'apo
- Partner with Ka'ū to share more native Hawaiian culture
- Partner with Ala Kahakai Trail to connect trail system
- Partner with Kalapana community to interpret archeological sites such as Kealakomo and to restore the brackish pond at 'Āpua.
- Create cultural resource partnerships to protect historic buildings (University of Hawaii, World Monuments Fund) and cultural landscapes (Haleakalā National Park and the State of Hawaii)
- Collaborate with state and multiple partners for coastal zone management similar to Papahānamokuāke
- Partner with Bishop Museum and Honolulu Academy of Art for art and photography in park programs
- Actively solicit more volunteers in park projects such as invasive species removal

- More connection and outreach with Volcano Community Association, Friends of Hawai‘i Volcanoes and Institute
- Set up educational outreach program to all communities surrounding the Three Mountain Alliance
- Create an Adopt-A-Trail Program
- Collaborate with Hakalau Forest (USFWS) to provide continuum of habitat
- Maintain/enhance partnership with USGS/Biological Resources Division and universities for advisory group on conservation biology
- Allow volunteers to help with eradication of ungulates
- Partner with Hawaii Speleological Survey to map lava tube systems
- Communicate with families in the area for history, especially Kahuku

Future of the Kahuku Unit

Resource Protection in Kahuku

Many public comments received on the future of Kahuku urged that the park’s main priority should be the restoration and protection of its native ecosystems. As one person expressed, ***“Geographically, Kahuku is the keystone of a conservation vision”***. Numerous comments mentioned the need to increase fencing of boundaries to protect key natural areas from the impacts of non-native ungulates. Many comments encouraged the park to restore the ranching pastures to natural conditions, with everything below tree line restored to native forests. A few respondents urged that the park preserve a small section of the pastures as an historic cultural landscape for interpretation. One rancher with past cattle management experience at Kahuku cautioned that ***“preservation for preservation’s sake without society’s participation contributes to a disconnect”*** and suggested using cattle grazing as a management tool for forest restoration and a way to do something different. Several people mentioned their satisfaction that the park had assumed the care and stewardship of Kahuku’s great natural and cultural resources. Mention was made about the need to protect Kahuku’s archeological sites by locating trails and visitor areas away from cultural sites.

Other individual comments and suggestions on resource protection, research and management at Kahuku include:

- No desecration of Native Hawaiian sacred sites
- Hire staff educated in converting ranchland and exotic grasses into native ecosystems
- Allow vehicular access for people working on restoration projects, both within the park and on adjacent lands
- Protect bird habitat in mauka areas
- Restore with kīpukas, let the fragments coalesce
- Use grazing management as a tool for reforestation
- Want to see no mouflon sheep in Kahuku so no need for plants in cages
- Need funding for sensitive and endangered bird recovery
- Rather see money spent on resources and restoration than for facilities
- Follow Haleakalā summit model for protection of petrels from rats and cats
- Develop strong research program at Kahuku but with solid guidelines
- Concern about possible visitor introduction of ants and other invasive species up mauka on the rift zone
- Trails should stay off the SW Rift due to archeological resources
- Provide a research field station where researchers could stay and work

Visitor Access to Kahuku and Desired Visitor Experiences

Throughout public scoping, numerous people mentioned a strong desire to access Kahuku in order to see the special places that resulted in Kahuku's protection as part of Hawai'i Volcanoes National Park. Many requested the ability to explore, enjoy and appreciate the special natural beauty of Kahuku on their own, not just through participation in a ranger-led hike or a special event. A majority of commenters stressed that the park needed to provide access yet be careful in controlling visitor use in order to protect the native ecosystems of Kahuku, geologic features and cultural resources. Some respondents advocated that certain areas be off-limits to access. A few people advocated for unlimited access, 24 hours a day. One person felt that Kahuku should be day-use only, closing at sunset.

Many respondents asked that the park provide opportunities for a diversity of new visitor activities at Kahuku. Frequently, comments mentioned the need for a system of hiking trails, overnight camping or lodging, picnicking opportunities with views and trails to accommodate bicycles, horseback riding and use of pack stock. There was a strong interest by the public in interpretive signs and educational exhibits to orient and educate visitors on the resources. Two respondents felt that off-road recreational vehicles could be used if there was strict enforcement. Others emphasized that 4X4 access should be banned. One respondent suggested there be designated sections of Kahuku where recreational hunting would be allowed.

Many comments often alluded to a difference between activities best suited to the setting in the lower pastoral portions of Kahuku and those activities allowed in the mauka areas, currently delineated by the green gate. Several comments mentioned that there should be only non-motorized access in the upper area of Kahuku. The mauka areas were often described as *“vast”, “rugged” “raw” and “remote”* with *“extraordinary areas like nowhere else on Earth”*. Others suggested that public access on roads be allowed for visitors to see mauka geologic features such as the sulphur cones and to gain access to viewing rare birds.

A few people used the term “wilderness” to describe the wilderness quality or wilderness values of Kahuku that should be protected. One person suggested that parts of Kahuku such as the upper slopes of Mauna Loa should be officially designated as wilderness, connecting with the existing Mauna Loa Wilderness.

Visitor Facilities and Services in Kahuku

Although opinions varied as to the level of infrastructure needed to accommodate visitors, most respondents seemed to be describing a less developed or more primitive type of infrastructure for Kahuku. Mention is often made of a minimum of motor vehicle access, narrow roads, and a network of hiking trails, small picnic areas, compost restrooms and rustic self-registering campground facilities. Some comments stated a need to keep Kahuku *“natural”* or *“pristine”* with *“no major development”* in the future. Several respondents also mentioned that the infrastructure should harmonize with the natural landscape, use local materials and be built sustainably. A smaller number of respondents envision an increased level of visitor facilities, suggesting paved roads, a visitor center, large capacity restrooms, drinking fountains, parking areas, wayside exhibits at all trailheads, a new hula platform for performances and a variety of commercial services. Re-use of the historic ranch house and outlying structures for interpretation, park concessions or a park field office were mentioned by various respondents.

Trails in Kahuku

New trails were the most highly mentioned type of new infrastructure suggested for Kahuku and numerous comments mentioned the need for a hiking trail system. Some suggested the trails be linked to a central visitor staging area. Many people suggested backcountry bike paths and horse

trails should also be provided. Some urged that bike paths be separate from cars. Another idea mentioned was that the park should re-establish historic trails or Native Hawaiian trails as a great visitor experience.

Quite a number of respondents mentioned the need for some sort of high-elevation trail system linking the upper slopes of Mauna Loa to connect the two large areas of the park. A hut-to-hut experience with long-distance trekking opportunities was suggested. One person submitted a detailed trail proposal to link the park with state and private landowners through an upper elevation trail system that would encircle Mauna Loa. Another person expressed concern about the remoteness and high challenge personality of Mauna Loa's Southwest Rift and the lack of water for great distances, stating that people should be required to have qualifications for hiking there, similar to the climbing requirements in Denali National Park.

Another person explained, ***"Some of the most fantastic geology is up there but the area is extremely rugged, even for experienced travelers with spots where the lava breaks through when hiking. The park might be involved in a lot of patrolling and search and rescue incidents..."***

Camping in Kahuku

The desire to camp in Kahuku was mentioned often by respondents. People gave several descriptions of possible campgrounds suggesting a "family-friendly" campground with designated sites, a self-service primitive campground with only minimal restrooms and water, a cabin system connected by hiking trails, hike or bike-in campsites, at least two backcountry campsites and a concession-run, hard-wall tent cabin experience similar to the Yosemite high camp system.

Commercial Services in Kahuku

Among those who suggested future commercial services in Kahuku, the range of comments were widely varied, with a majority of those who commented on commercial services advocating for a higher level of development. Suggestions included:

- a "family-friendly" restaurant
- a coffee house with a place to display fine art
- a 5-star culinary school run as a restaurant
- overnight lodging
- internet access
- organized trekking with commercial guides to access a hut-to-hut trail system
- horse pack concessions and trails with overnight cabins in the backcountry
- a concession-run hard wall tent cabin system offering food and lodging
- guided hiking with commercial guides
- air tours to give people access to mauka aerial views
- a shuttle service between Kahuku and the Kīlauea Visitor Center
- an Hawaiian Ranching Heritage Museum with small working ranch providing food and overnight lodging
- concession photography trips

Roads in Kahuku

There was a diversity of ideas presented regarding roads in Kahuku. Some commented that the roads should be kept the same while others said they should be improved. Several thought the old roads should be removed and restored to a natural environment. One person emphasized that the old roads were a cultural desecration and a scar on the landscape.

Opinions varied as to whether there should be road access to up country Kahuku. Of those favoring roads, one person said that they expected that the Kahuku Unit would be united with the rest of the park and that paved roads would be one way to do that, as well as allow people to gain access to higher elevation bird watching. Several mentioned the desire for road access to up country areas to bird watch and view geologic resources. Two comments suggested four-wheel drive or ATV access be allowed on roads to reach higher elevation areas. Others emphasized that four-wheel drive and ATV access on roads should be banned. One person gave a detailed vision of roads in Kahuku, suggesting a small one-way loop for cars and bikes in the lower area of Kahuku with a paved road similar to the Hilina Pali road going farther up. The road would be chip-sealed to prevent the spread of invasive species and be narrow, designed with the eye of a naturalist.

The entrance/exit to the Kahuku Unit, off Highway 11 was mentioned several times as needing re-configuration due to the speed and curve of the highway in that location. One person suggested a traffic light to slow people down. Another respondent suggested that access be provided through Ocean View Estates or at another location along the park boundary.

Education and Interpretation Opportunities in Kahuku

Respondents showed a substantial desire for increased education and interpretation opportunities at Kahuku. There was a common consensus on the need to orient and educate visitors about the special nature of the resources specific to Kahuku. Most people who commented on the need for interpretation expressed a desire to see stories told about the rare plants and birds, the restoration of forests, geologic features and the cultural history of Kahuku. Many respondents suggested the need for outdoor wayside exhibits and signs, regularly scheduled ranger-led talks, living history programs, junior ranger programs and community outreach programs with schools and communities. A few people suggested that Kahuku needed its own visitor center.

A few respondents were very excited about the possibility of highlighting the ranching or paniolo story as an emphasis of interpretation. Among those who commented on the ranching history, opinions varied as to where and how the ranching story should be told, ranging from thoughts that the ranching story is best told in other places on the island to suggesting it be told on-site in a visitor center or ranching heritage center or in outdoor exhibits. Several local ranchers associated with Kahuku in the past suggested that the ranch buildings and part of the lower pasture could be used as a working ranch to tell the story of the paniolo lifestyle. One person suggested that a paddock of captive mouflon sheep could be used to interpret ungulate impacts on the landscape. Another person gave a detailed vision for a Heritage Ranch experience including a small active working ranch with skilled blacksmith, saddle/tack leatherworkers, and associated barns, stables, corrals and bunkhouses. Another suggested a lodge or dude ranch type of facility offering food and lodging where visitors would mingle with a live-in working ranch family.